## STATEMENT OF CONSIDERATIONS

REQUEST BY CONOCO, INC., FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC26-01NT41098; W(A)-02-019, CH-1102

The Petitioner, Conoco, Inc. (Conoco), was awarded this cooperative agreement for the performance of work entitled, "Evaluation of Ultra Clean Fuels from Natural Gas." The purpose of the cooperative agreement is to perform comprehensive life cycle analyses and a market study on ultra clean fuels of commercial interest produced from natural gas. Fuel samples will be obtained and tested in engines to obtain data on emissions for validation of the life cycle analysis. This data will be used to optimize fuel compositions and engine operation in order to minimize the release of atmospheric pollutants. Development and testing of both direct and indirect methanol fuel cells will be conducted and the optimum properties of a suitable fuel-grade methanol will be defined. Larger-scale commercial testing is also proposed for a second phase of this project. Conoco is currently subcontracting with Nexant and Pennsylvania State University. This waiver is directed toward inventions of Conoco only. The waiver does not apply to inventions made by Bayh-Dole participants pursuant to P.L. 96-517, as amended, or National Laboratories.

The total estimated cost of the cooperative agreement is \$26.8 million, with Conoco cost sharing 50%, or \$13.4 million. DOE's share is thus also \$13.4 million. The planned performance period is July 10, 2001 through September 30, 2006.

In its response to questions 5 and 6 of the attached waiver petition, Conoco has detailed its technical competence in the field of fuel technology. With respect to the life cycle and market study to be performed. Conoco will be directing Nexant in this effort. Nexant has been actively involved in DOE's fossil energy program, including Gas Conversion and Ultra Clean Transportation Fuels. Conoco has been conducting extensive research on new technologies for the production of ultra clean liquid transportation fuels from natural gas. This has led to the development of proprietary processes for the conversion of natural gas to syngas (Conoco's CoPOX™) and synthesis of hydrocarbon liquids from syngas via Fischer-Tropsch chemistry. It has plans to build a Gas-to-Liquids (GTL) semi-works plant that will produce 400 barrels per day of liquid products including Fisher-Tropsch diesel. Conoco further explains that the fuel evaluation and engine testing component of this effort will be coordinated by the Pennsylvania State University. This project team has made the results of this background work known through various publications and several conferences and proceedings, and a sample list of these publications and proceedings is attached to the waiver petition as Exhibit A. Conoco has also attached its year 2000 annual report as evidence of its worldwide expertise in various aspects of energy products. Conoco's response fully demonstrates its technical competence in the field of fuel technology.

In its response to questions 9 and 10 of the attached waiver petition, Conoco states that grant of the waiver will not have any adverse effect on competition, or result in excessive market concentration or a position of market power in the production or distribution of clean alternative fuels. The feedstocks to be used are widely available around the world and several companies are working to produce these fuels in commercial volumes based on their own GTL technologies. Conoco states that grant of the waiver will enable it to reap the benefits and breakthroughs achieved through years of expensive research. At the same time, the waiver grant will assist Conoco to evaluate and optimize the composition of clean fuels that will be produced using Conoco's competitive, proprietary technology, and determining the most economical way to

introduce these fuels into the marketplace. Therefore grant of the waiver will have a positive effect on competition and market concentration.

The subject cooperative agreement will be modified to add the Patent Rights-Waiver clause in conformance with 10 CFR 784.12, wherein Conoco has agreed to the terms of 35 U.S.C. §§ 202, 203, and 204. This waiver clause will also include a paragraph entitled U.S. Competitiveness, in which Conoco agrees to substantial U.S. manufacture of subject inventions (attached hereto). Additionally, Conoco agrees not to transfer subject inventions to any other entity unless that other entity agrees to these same requirements. The petitioner has further agreed to modification of the data clause of the subject cooperative agreement (48 C.F.R. 952.227-14) by adding paragraph (k), Alternative VI, concerning contractor licensing of data

Considering the foregoing, it is believed that granting the waiver will provide the Petitioner with the necessary incentive to invest resources in the commercialization of the results of the agreement in a fashion which will make the agreement's benefits available to the public in the shortest practicable time. In addition, it would appear that grant of the above requested waiver would not result in an adverse effect on competition nor result in excessive market concentration. Therefore, in view of the objectives and considerations set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver, as set forth above, be granted.

Mark P. Dvorscak **Assistant Chief Counsel** Intellectual Property Law Division

Date: 22 2003

Based on the foregoing Statement of Considerations and the representations in the attached waiver petition, it is determined that the United States and the general public will best be served by a waiver of rights of the scope described above, and therefore the waiver is granted. This waiver will not apply to any modification or extension of this agreement, where through such modification or extension, the purpose, scope, or cost of the agreement is substantially altered.

CONCURRENCE:

Edward Schmetz Office of Product Line Director for Coal Fuels and Industrial Systems Office of Fossil Energy

Date:\_ <u>3</u>-ノ》-*03* 

APPROVAL:

Paul A. Gottligb

Assistant General Counsel for Technology Transfer and Intellectual Property

Date: 3 - 26-07

(t) U. S. COMPETITIVENESS The Contractor agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States unless the Contractor can show to the satisfaction of the DOE that it is not commercially feasible to do so. In the event the DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. The Contractor agrees that it will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Should the Contractor or other such entity receiving rights in the invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by the DOE.